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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
MISLEH, JUSTIN P	

ART UNIT	PAPER NUMBER
2612	12

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/216,489	MOHAMMED ET AL.	
	Examiner	Art Unit	
	Justin P Misleh	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *29 - 52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *29 - 52* is/are rejected.

7)☒ Claim(s) *31 and 41* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Objections

1. **Claims 31 and 41** are objected to because of the following informalities: inconsistencies with their respective parent claims. Claims 31 and 41 state therein *the digital camera*, however, no previous digital camera has been claimed. Rather *an imaging device* is claimed in their respective parent claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 29 – 34, 36 – 44, and 46 – 52** are rejected under 35 U.S.C. 102(e) as being anticipated by Noro et al.

4. For **claims 29, 39, and 49**, Noro et al. disclose, as shown in figures 5 – 11 and as stated in columns 6 (line 34) – 11 (line 26), a method for controlling the communication within an imaging system comprising an imaging device, an imaging management device, and an imaging operation device. According Noro et al., as shown in figure 5 and as stated in column 6 (lines 45 – 67), the imaging device is comprised of a video camera (16), the imaging management device

(12) is mainly comprised of a storage unit (32) and a camera controller (34), and the imaging operation device (20) is mainly comprised of a console (46), a monitor (50), a storage unit (42), and an operation manager (48). The imaging management device (12) and the imaging operation device (20) are connected by means of a LAN (10) and/or any other suitable network means (see column 13, lines 1 – 9) and comprise of a plurality of imaging management devices (14, etc.) and a plurality of imaging operation devices (22, etc.) as stated in column 7 (lines 49 – 59). In the event a plurality of imaging operation devices (20, 22, etc.) attempt to control the same single imaging device (16), *right of access* (i.e. sole access), is given to the imaging operation device (20, 22, etc.) which was connected to the imaging device (16) the earliest in terms of time, as stated in column 9 (lines 3 – 9).

Together the imaging management devices (12, 14, etc.) and imaging operation devices (20, 22, etc.) are operable to control the operation of the imaging devices (16, 18, etc.). There are essentially two distinct imaging device control methods in which the control of an imaging device is performed. Both of the control methods originate in the imaging operation device (20) and neither of the control methods can be performed without the complete participation of the imaging device (16), the imaging management device (12), and the imaging operation device (20). The imaging operation device (20) is comprised of a console (46) wherein the console (40) may be implemented in software (see column 7, lines 39 – 48) and is comprised of camera pan (62 and 64), tilt (66 and 68), zoom (72 and 74), and preset position (61, 63, 65, 67, 69, and 71) buttons as shown in figure 6 and as stated in columns 7 (lines 60 – 67) and 8 (lines 1 - 10). As a side note, since an application program is used as described below, the two distinct control methods can be thought of as two distinct programs within the application program.

The first control method is designated as *normal control* and is defined as an immediate response control method. In other words, if a user is accessing the console (46) and depresses the software-implemented pan left (62) button, a command representative of that button is immediately generated and transmitted to the imaging management device (12) which communicates with the imaging device (16) to perform the user's desired control for the duration of time that the button is depressed. In a similar fashion, as stated in column 9 (lines 56 – 59), all of the camera pan, tilt, and zoom buttons (62, 64, 66, 68, 72, and 24) operate under *normal control*.

The second control method is designated as *simple control* and is defined as a delayed response control method. In other words, if a user is accessing the console (46) and depresses the software-implemented preset position (61) button, commands representative of that button are accumulated in the imaging operation device (20) and transmitted to the imaging management device (12) which communicates with the imaging device (16) to perform the user's desired control according preset position data stored in the storage unit (32) in the imaging management device (12). The imaging device (16) is positioned according to the preset position data, stored in the storage unit (32) in the imaging management device (12), which is comprised of data representative of certain predetermined camera pan angles, tilt angles, and zoom ratios. In a similar fashion, as stated in column 9 (lines 56 – 59), all of the preset position buttons (61, 63, 65, 67, 69, and 71) operate under *simple control*.

As shown in figure 9 and as stated in columns 9 (lines 26 – 67) and 10 (lines 1 – 10), the control method of the imaging operation device (20) is defined by means of a flowchart. After an initiating driver program, the flowchart is implemented in the imaging operation device (20)

by means of an application program, as stated in column 7 (lines 39 – 48), that is comprised of a graphical user interface (GUI) and interactive with a pointing device (mouse). The first two steps of the method involve checking to see whether a particular imaging operation device (20) is connected to a particular imaging management device (12) and imaging device (16) according to the *right of access* concept described above. Once these steps are completed, formal control proceeds. At step S15, the application program acquires a clicked button status (i.e. Has a button on the console been selected or depressed?). At step S16, the application program determines whether the clicked button, acquired in step S15, corresponds to *simple control* or *normal control*. If the application program determines that the clicked button corresponds to *normal control*, flow proceeds to step S17 wherein *normal control* is performed according to the immediate response operation described above. If the application program determines that the clicked button status corresponds to *simple control*, flow proceeds to step S18 wherein a *simple control* command is generated. In step S19, the clicked button status, acquired by the application program in step S15, and the *simple control* command, generated by the application program in step S19, are transmitted to the imaging management device (12). As stated in columns 9 (lines 66 and 67) and 10 (lines 1 – 10), the generation of the *simple control* command is dependent upon the clicked button status and is comprised of the clicked button identification data accordingly. This completes the control method of the imaging operation device (20).

In addition, the Examiner notes, that in step S15, the application program identifies that a user has selected a preset position button (e.g. 61) and generates a command that forces flow in the control method to proceed to step S16, hence the application program has generated an *action command*. In proceeding to step S18, after the application program has determined that the

action command was representative of a *simple control action*, the application program generates a *simple control* command to position the imaging device (16) to preset position data as described above, hence the application program has generated a *setup command*. In concluding with step S19, both the *action command* and the *setup command* are transmitted to the imaging management device (12).

The key feature of Noro et al. is that the *setup command* is dependent upon the *action command*. In other words, the *setup command* would not be generated if an *action command* had not been not previously generated. The *action command* is generated upon user input at step S15 and instructs the imaging device (12) to perform an action wherein that action corresponds to positioning the imaging device to preset position data. The *setup command* is generated upon the generation of the *action command* and informs the imaging device (12) as to which preset position data, stored in storage unit (32), to the imaging device (12) is positioned to.

Therefore, Noro et al. disclose a method comprising/instructions to cause a processor-based system to/a system comprising:

accumulating commands generated by the execution of an application program, the commands including an action command (generated at step S15) to cause an imaging device to perform an action and at least one set up command (generated at step S18) to set up the imaging device to perform the action;

determining whether one of the commands generated by the execution of the application program is said action command (determined in step S16); and

triggering transmission (transmitted in step S19) of all of the accumulated commands to the imaging device in response to the determination that one of the commands is the action command.

5. As for **claims 30 and 40**, Noro et al. disclose, as shown in figure 9 and as stated above, the accumulated commands are comprised of the action command (determined and generated in step S15) and the setup command (generated by step S18). The accumulated commands are transmitted in step S19, which is the last step in the flow of the control method. The transmitting step S19 can only be reached once it is determined in step S15 that one of the commands is the action command. Also, as shown in figure 9, the action command and the setup command are accumulated only once to flow in the control method and thus only a single set of accumulated commands are generated and transmitted at one time. Thus, Noro et al. disclose responding to the determination by transmitting the accumulated commands to the imaging device during a time in which no other commands are transmitted to the imaging device.

6. As for **claims 31 and 41**, Noro et al. disclose that the imaging management device (12) and the imaging operation device (20) are connected by means of a LAN (10) and/or any other suitable network means (see column 13, lines 1 – 9). Also, as stated in column 7 (lines 36 and 37), Noro et al. disclose that the imaging device (16) transmits video images to a monitor (50) within the imaging operation device (20) and that the imaging operation device (20) transmits commands to the imaging management device (12), via the LAN (10). Furthermore, as stated in column 8 (lines 26 – 36), the video images may be transmitted at a bit rate of 290 kbits/s. Since, Noro et al. disclose a bit rate as the rate in which the video images may be transmitted to the imaging operation device (20) from the imaging device (16), Noro et al. inherently disclose that

the video images and commands are delivered to the imaging operation device (20) and the imaging management device (12) over a serial bus. Lastly, Noro et al. disclose that the imaging operation device (20) may be a personal computer, as stated in column 9 (lines 28 – 36). Therefore, Noro et al. disclose transmitting all o the accumulated commands to the imaging device over a serial bus in response to the determination that one of the commands is the action command.

7. As for **claims 32 and 42**, Noro et al. disclose, as supported in column 8 (lines 26 – 36), wherein the action command (generated in step S15) comprises a command to instruct the imaging device to capture a frame of a video image. As stated above, the action command is generated by the application program in response to a user's input into the console (46). The action command instructs the imaging device (16) to perform a particular action. In the case of *simple control*, the imaging device (16) is instructed to capture a video image at a preset position. Video images are comprised of a series of still image frames and, therefore, a frame of a video image is captured.

8. As for **claims 33 and 43**, Noro et al. disclose, as supported in column 8 (lines 26 – 36), wherein the action command (generated in step S15) comprises a command to instruct the imaging device to capture a frame of a still image. As stated above, the action command is generated by the application program in response to a user's input into the console (46). The action command instructs the imaging device (16) to perform a particular action. In the case of *simple control*, the imaging device (16) is instructed to capture a video image at a preset position. Video images are comprised of a series of still image frames and, therefore, a frame of a video image is captured.

9. As for **claims 34 and 44**, Noro et al. disclose that the imaging management device (12) and the imaging operation device (20) are connected by means of a LAN (10) and/or any other suitable network means (see column 13, lines 1 – 9). Also, as stated in column 7 (lines 36 and 37), Noro et al. disclose that the imaging device (16) transmits video images to a monitor (50) within the imaging operation device (20), via the LAN (10). Furthermore, as stated in column 8 (lines 26 – 36), the video images may be transmitted at a bit rate of 290 kbits/s. Since, Noro et al. disclose a bit rate as the rate in which the video images may be transmitted to the imaging operation device (20) from the imaging device (16), Noro et al. inherently disclose that the video images are delivered to the imaging operation device (20) over a serial bus. Lastly, Noro et al. disclose that the imaging operation device (20) may be a personal computer, as stated in column 9 (lines 28 – 36). Therefore, Noro et al. disclose wherein the action command comprises a command to instruct the imaging device to deliver a frame of a previously captured still image to a computer over a serial bus.

10. As for **claims 36 and 46**, Noro et al. disclose, as stated in column 9 (lines 28 – 36), a driver program is loaded from an external storage device onto a main memory and after loading the driver program, the flowchart, representing the control method, is implemented in the imaging operation device (20) by means of an application program, as stated in column 7 (lines 39 – 48), that is comprised of a graphical user interface (GUI) and interactive with a pointing device (mouse). As stated above, the accumulating, triggering, and determining of commands take place in the application program. Therefore, Noro et al. disclose wherein the accumulating, triggering, and determining occur in response to execution of a driver program for the imaging device (16), the drive program being separate from the application program.

11. As for **claims 37, 47, and 50**, Noro et al. disclose, as stated above, that the action command is generated by the application program in response to a user's input into the console (46). The action command instructs the imaging device (16) to perform a particular action. In the case of *simple control*, the imaging device (16) is instructed to capture a video image at a preset position. Video images are comprised of a series of still image frames and, therefore, a frame of a video image is captured. Therefore, Noro et al. disclose, wherein the application program comprises one a still image capture program and video image capture program.

12. As for **claims 38, 48, and 52**, Noro et al. disclose, as shown in figure 9 and as stated above, the accumulated commands are comprised of the action command (determined and generated in step S15) and the setup command (generated by step S18). The accumulated commands are transmitted in step S19, which is the last step in the flow of the control method. The transmitting step S19 can only be reached once it is determined in step S15 that one of the commands is the action command. Thus, Noro et al. disclose preventing any of the accumulated commands from being transmitted to the imaging device until the determination that one of the commands is the action command.

13. As for **claims 51**, Noro et al. disclose, as stated above, that the action command is generated by the application program in response to a user's input into the console (46). The action command instructs the imaging device (16) to perform a particular action. In the case of *simple control*, the imaging device (16) is instructed to capture a video image at a preset position. Video images are comprised of a series of still image frames and, therefore, a frame of a video image is captured. Therefore, Noro et al. disclose, the capture of still images and the video

images and, thus, Noro et al. disclose, wherein the camera is a multimode camera having a first mode to capture still image and a second mode to capture a video image.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. **Claims 35 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Noro et al.

16. As for **claims 35 and 45**, Noro et al. disclose, as stated in column 8 (lines 6 – 10), the data representative of the preset position buttons (61, 63, 65, 67, 69, and 71) of the *simple control* is stored in the storage unit (32) of the imaging management device (12). As shown in figure 9 and as previously stated above, in step S18, the application program generates a *simple control* command to position the imaging device (16) to the stored preset position data and, hence, the application program has generated a *setup command*. The representative data stored in the storage unit (32) is comprised of information corresponding to image sensing directions and zooming ratios, however, Noro et al. is silent with respect to the storage of information corresponding to an exposure time in the storage unit (32). Since, Noro et al. teach storing imaging device setup information, such as imaging sensing direction and zooming ratio information, at the time the invention was made, one with ordinary skill in the art would have been motivated to also include exposure time information in the storage unit (32). Thus, at the

time the invention was made, it would have been obvious to one with ordinary skill in the art to have included exposure time information in the storage unit (32), in addition to the imaging sensing direction and zooming ratio information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The examiner can normally be reached on Monday - Thursday from 7:30 am to 5:30 pm and on alternating Fridays from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703.306.0377.

JPM
November 28, 2003

WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600